

Safety Information:

Installation should only be conducted by a qualified electrician in accordance with NEC, local country codes, and any relevant additional codes.

Installation may require advice from a qualified person or licensed electrician.

Retrofit installations already contain screw/screwless terminal(s) for the connection to the AC Mains. (Note: If AC Mains connection terminal(s) are lost, damaged, or otherwise missing, replacements must be rated for a minimum of 300VAC and 1A. This terminal(s) must be Listed or conform to either EN 60998-2-1 or EN 60998-2-2 and must be installed per the manufacturer's instructions.)

WARNING - Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED Retrofit Kit. Check for enclosed wiring and components.

AVERTISSEMENT - Risque d'incendie ou de choc électrique câblage du luminaire et pièces électriques peut être endommagé lors du forage pour l'installation de LED Retrofit Kit Vérifier le câblage et les composants fournis.

WARNING - Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaries' electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

AVERTISSEMENT - Risque d'incendie ou de choc électrique LED Rénovation installation du kit nécessite la connaissance des systèmes électriques de luminaires Si ce n'est pas qualifié, n'essayez pas de l'installation à un électricien qualifié.

WARNING - Risk of fire or electric shock. Install this kit only in the luminaries' that have the construction features and dimensions shown in the photographs, Table 1 and/or sketches and where the input rating of the retrofit kit does not exceed the input rating of the luminaire.

AVERTISSEMENT - Risque d'incendie ou de choc électrique. Installez ce kit dans les luminaires »qui présentent les caractéristiques de construction et les dimensions indiquées dans les photographies, les tableaux 1 et / ou des croquis et où la capacité d'entrée de la trousse de réparation ne dépasse pas la valeur nominale d'entrée de l'appareil.

WARNING - Risk of fire or electric shock. Not for direct replacement of fluorescent lamps. Use only with corresponding LED Drivers per Table 1.

AVERTISSEMENT - Risque d'incendie ou de choc électrique Non pour le remplacement direct des lampes fluorescentes Utilisez uniquement avec les pilotes LED correspondante par le tableau 1.

WARNING - Disconnect power before installation, maintenance, or repair.

ATTENTION - Couper l'alimentation électrique avant l'installation, l'entretien ou la réparation.

WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

AVERTISSEMENT - Pour éviter d'endommager le câblage ou à l'abrasion, ne pas exposer le câblage des bords de tôle ou d'autres objets pointus.

Install to examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.

Only those open holes indicated in the photographs and/or drawings may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components.

Installers should not disconnect existing wires from lampholder terminals to make new connections at lampholder terminals. Instead installers should cut existing lampholder leads away from the lampholder and make new electrical connections to lampholder lead wires by employing applicable connectors

Not for use with dimmers for Models not provided with "DIM" suffix.

Not for use with line voltage/TRIAC dimmer.

Suitable for Damp Locations.


Consult factory for Models compatible with line voltage /SELV dimmers.

LED Drivers/power source can be mounted remote from the luminaire

Base types will vary depending customer request and installation, consult factory.

Kit Contents (See Table 1)	
LED Tubes	- [1 ... 4, 6]
LED Driver	- [1 ... 3]
Spring Clip	- [1 or more]
Locking Wire	- [1 or more]
Metal Clips	- [2 or more]
Self Tapping Screws (#6)	- [5 or more]
Self Tapping Screws (#4 (R1 Only))	- 3
LED Driver Push On Connectors	- 2
Wire Nuts (R1 Only)	- 2
Driver Label	
Instruction Manual	
Modification Label	

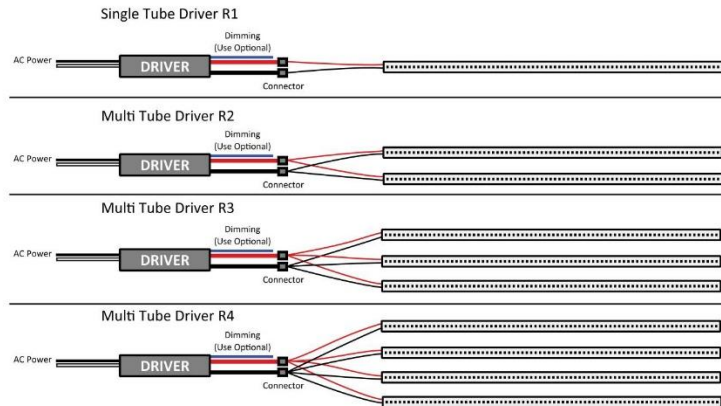
Table 1: Retrofit Classification Table

Retrofit Kit Model	Length ft(mm)	Luminaire Dimensions (min)	Luminaire Type	LED Tube (max)	LED Drivers (max)	Attachment(s) per Tube 
Rt-2ww, Rt-228 Where t is 1 or 2 Where ww ≤13	2(600)	24" by 3" by 1.5"	Surface Mounted with or without diffuser	2	2	0
Rt-2ww, Rt-228 Where t is 1 to 4 Where ww ≤13	2(600)	24" by 24" by 4"	Recessed type IC or Non-IC with or without diffuser	4	2	0
Rt-3ww Where t is 1 or 2 Where ww ≤18	3(900)	36" by 3" by 1.5" 36" by 24" by 4"	Surface Mounted with or without diffuser Recessed type IC or Non-IC with or without diffuser	2	2	0
Rt-4ww, Rt-454 Where t is 1 or 2 Where ww ≤28	4(1200)	48" by 3" by 1.5"	Surface Mounted with or without diffuser	2	2	0
Rt-4ww, Rt-454 Where t is 1 or 2 Where ww ≤28	4(1200)	48" by 12" by 4"	Recessed type IC or Non-IC with or without diffuser	2	2	0
Rt-4ww Where t is 1 to 4 Where ww ≤28 Rt-454 Where t is 1 to 2	4(1200)	48" by 24" by 4"	Recessed type IC or Non-IC with or without diffuser	4	2	0
Rt-4ww, Rt-454 Where t is 1 to 4 or 6 Where ww ≤28	4(1200)	48" by 18" by 4"	Surface Mounted without diffuser	6	3	0
Rt-5ww Where t is 1 or 2 Where ww ≤35	5(1500)	60" by 3" by 1.5"	Surface Mounted with or without diffuser	2	2	1
Rt-6ww, Rt-681 Where t is 1 or 2 Where ww ≤43	6(1800)	72" by 3" by 1.5"	Surface Mounted with or without diffuser	2	2	1
R1-7ww	Consult Factory					
Rt-8ww, Rt-8108 Where t is 1 or 2 Where ww ≤57	8(2400)	96" by 3" by 1.5"	Surface Mounted with or without diffuser	2	2	1

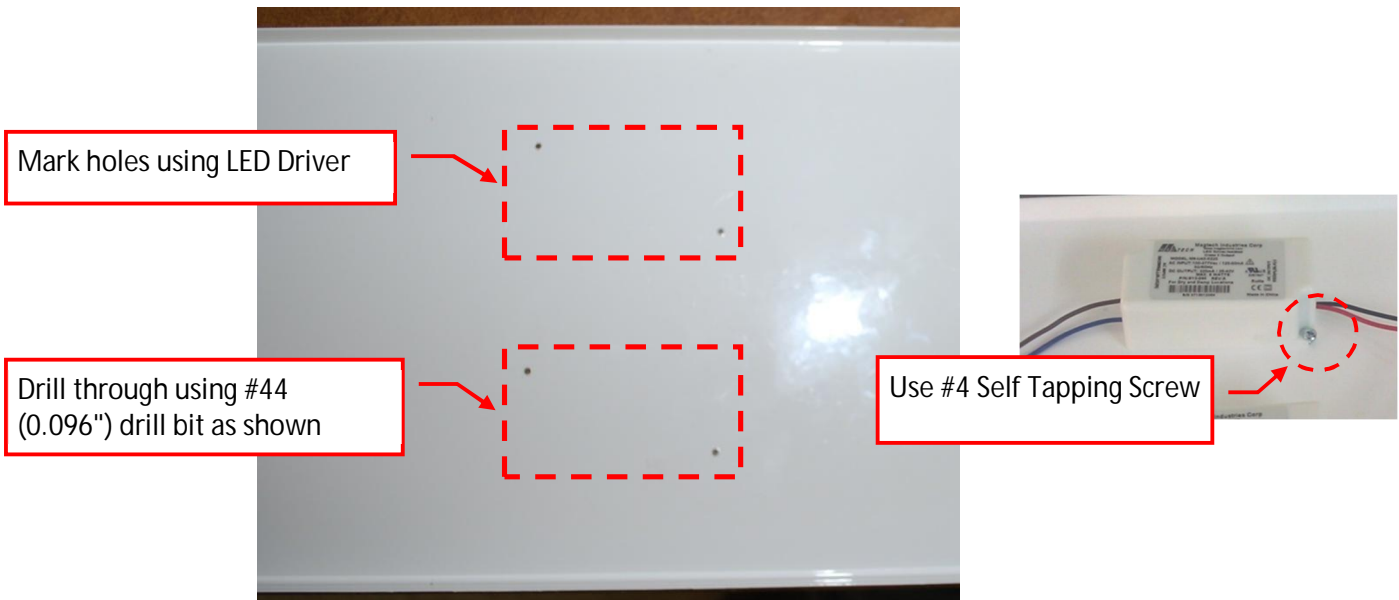
De-Lamping kit available, consult factory for proper configuration.

 2X 
 (special order)

INSTALLATION:



SPECIAL INSTALLATION INSTRUCTIONS - M Style LED Drivers (M9 and M18):



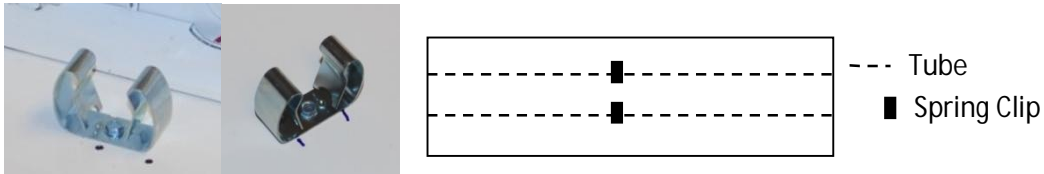
PREPARE FIXTURE



1. Verify AC Mains is de-energized
2. Remove troffer lens and fluorescent tubes from luminaire
3. Remove wireway cover from center of luminaire to expose ballast and wiring

4. Disconnect from AC Mains and remove ballast(s)
5. Dress or remove remaining wire(s) at lamp holders so that they are out of the way
6. Clean the surface of the troffer to remove any dirt or dust

INSTALL SPRING CLIPS (5 – 8' LED Tubes Only)



7. Using one of the provided Self Tapping Screws and Spring Clip, align and install the clip at the center point of the LED Tube

INSTALL LED DRIVERS

ENSURE THAT AC INPUT WIRE IS RELIABLY SEPARATED (MINIMUM ¼" SEPARATION) FROM THE DC and DIMMING (OPTIONAL) OUTPUT WIRE(S). THIS CAN BE DONE BY RUNNING ALL OF THE AC INPUT WIRING ON ONE SIDE OF THE LED DRIVERS AND ALL OF THE DC AND DIMMING OUTPUT WIRING ON THE OPPOSITE SIDE OF THE LED DRIVERS AND USING PROVIDED WIRE CLIPS TO SECURE WIRES TO LUMINAIRE. ENSURE THAT ALL CLIPS ARE FASTENED WITHIN THE BALLAST COVER REGION.

8. Attach Driver label as shown in Figure 2
9. Attach one "push on" connector to the RED and BLACK LED Driver wires as shown Figure 3. Wire nuts are an option for R1 kit
10. Dimming Drivers only (as required). If the dimming function of the Driver is not being used, the wires must be prevented from incidental contact or the dimming function will be enabled. This can be accomplished by cutting the wires, applying electrical tape or other physical means to the exposed ends of the purple, yellow, and grey wire
11. Review layout locations of LED Driver(s) their AC input, DC output and dimming (optional) wires and the LED Tube wires before final installation
12. Table 1 itemizes the number of LED Driver(s) that can be installed in various Luminaires'
13. Using two(2) of the Self Tapping Screws, secure the LED Driver to the Luminaire. Ensure that the LED Driver is pressed tightly to the metal



Figure 2: Application of Driver label. Style and type of Driver will vary.

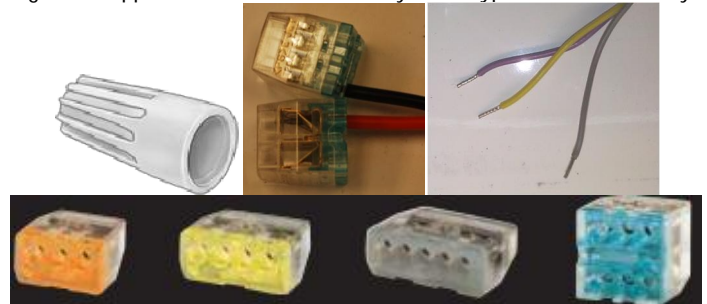


Figure 3: Insertion of LED Driver wire into connector (above). Number of ports and style will vary with Retro-Fit Kit type (lower). Example of dimming wires

14. Observe, layout and spacing requirements as discussed above for wire dressing as illustrated in Figure 4 and shown in Figure 1
15. Using two (2) of the Self Tapping Screws and two (2) Metal Clips, secure the AC Mains cable and DC cable to the luminaire
16. In the multi driver installation, minimum spacings of 1"(25.4mm) must be maintained as illustrated in Figure 4 and shown in Figure 5 & Figure 6



Figure 1: Example for an installed LED Driver in the wire way of a recessed luminaire.

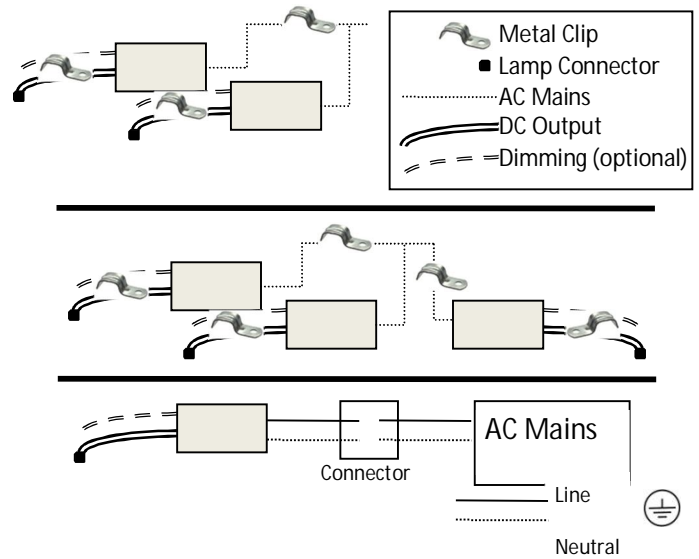


Figure 4: Sketches of various installation possibilities. Top, two(2) individual LED Drivers in the wire way. Middle, three(3) multi tube drivers. Minimum spacing must be maintained.

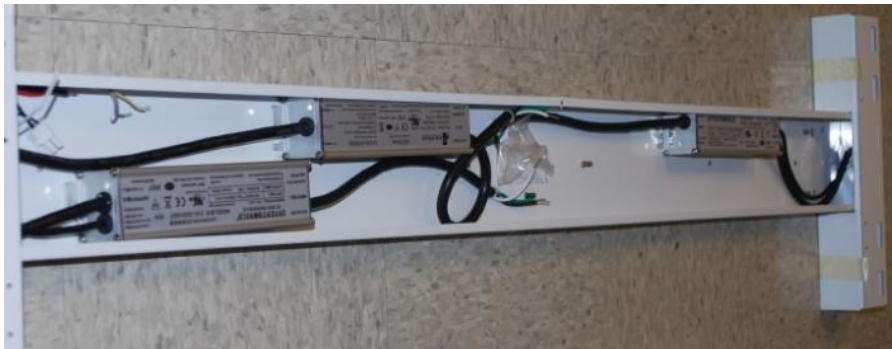


Figure 5: Example for an installed LED Driver in large gear tray. Drivers are at the minimum horizontal spacing.



Figure 6: Example of a multiple LED Driver installation in a large gear tray. Drivers are inline and spaced 1"(25mm) apart.

INSTALL LED TUBES

17. White shrink tubing slips over the RED/BLK wires as shown in Figure 7
18. Dress the wires by running them underneath the LED Tubes as shown in Figure 8 & Figure 9
19. For Geartrays drill a clean hole through the sheet metal as shown in Figure 9
20. Snap or rotate LED Tube into lampholders and Spring Clip as shown in Figure 10



Figure 7: White tubing over red/black wires



Figure 8: Example of wire routing in recessed luminaire

21. The leads of the lamps can be trimmed as required. For proper engagement with the "push on" connectors, strip length should be 1/2"(12.5mm)
22. Push on wires as required. Red leads go with RED, BLACK with black
23. NOTE: Additional ports are provided for rework and will vary depending on configuration. Wire nuts [provided R1 only] are permissible as an alternate connection means
24. Using the existing terminal(s), re-attach line, neutral, and earth (if present) on the LED Driver(s) to luminaire and AC Mains
25. Luminaries and installation conditions vary widely. Consult a qualified electrician for additional instructions
26. Route wires around edge of Wireway or through an punch outs as shown in Figure 9 & Figure 11
27. Replace Wireway or Gear Tray as shown in Figure 12

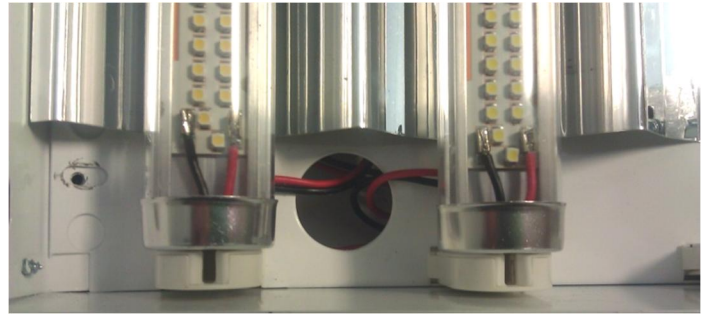


Figure 9: Example of wire routing in Gear tray

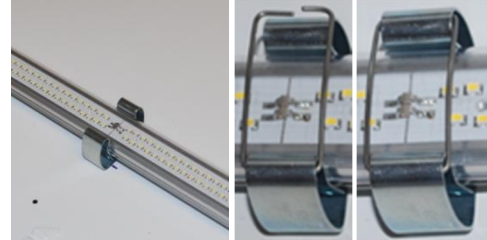


Figure 10: Spring Clip, Locking Wire and LED Lamp installation (For 5-8' only)

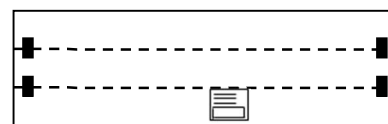
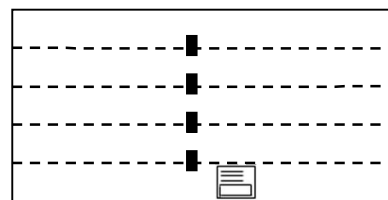


Figure 11: Routing of wires around edge of Wireway (circle)



Figure 12: Completed installation of Wireway.

28. Place Modification Label in visible location inside luminaire as illustrated in Figure 13
29. Replace lens
30. Reconnect power at circuit breaker




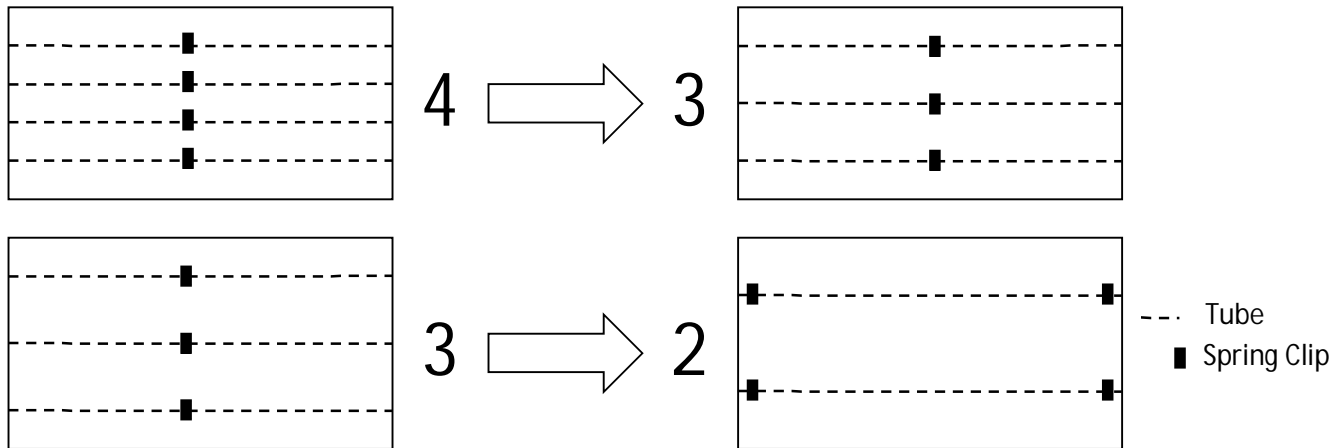
 Modification Label

Figure 13: Placement of the Modification Label

OPTIONAL INSTALLATION (De-Lamping, Suggested Options)

INDEPENDENCE LED RETROFIT TUBE SYSTEM ALLOWS EASY DELAMPING INSTALLATION. THE END CAPS OF AN LED TUBE DO NOT CARRY POWER AND ARE ONLY FOR MECHANICAL SUPPORT. THEIR NON USE IS IN COMPLIANCE WITH THE LISTING CLASSIFICATION AND DOES NOT EFFECT THE LISTING OF THE LUMINAIRE. WHEN DE-LAMPING, AN INSTALLER HAS THE OPTION TO MOVE THE LOCATIONS OF THE LED TUBES TO NEW AREAS WITH IN THE LUMINAIRE TO IMPROVE THE LIGHT DISTRIBUTION OF THE LUMINAIRE. THIS REQUIRES AN ADDITIONAL SPRING CLIP AND LOCKING WIRE. THESE CAN BE OBTAINED AT TIME OF ORDER.



1. When reducing from four(4) to three (3) tubes the center LED Tube can be mounted next to the Wireway
2. When reducing from three(3) to two(2) tubes the LED Tube can be re-centered within the Luminaire
3. Luminaries and installations vary. The installer is encouraged to work with the end customer to customize the quality of the light